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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,230	10/13/2004	Hans-Bernhard Bolza-Schunemann	WI.1917PCT-US	4323
7590 01/18/2007				
Douglas R Hanscom Jones Tullar & Cooper Eads Station PO Box 2266 Arlington, VA 22202			EXAMINER KUMAR, KALYANA VENKA K	
			ART UNIT	PAPER NUMBER
			3653	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/18/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/510,230

Applicant(s)

BOLZA-SCHUNEMANN, HANS-  
BERNHARD

Examiner

Kalyan Kumar

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-69 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 30-69 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10-13-2004.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This is a first action on the merits of application 10/510230.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 60-62 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation of "a suction roller drive motor" is not supported in the specification or drawings.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30, 31, 37, 38, 43-45, 47, 48, 52-55, 58, 60, 63, and 66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 30, the claim recites, "a longitudinal direction in the sheet travel direction and transverse direction, said longitudinal direction being greater than said transverse direction", is indefinite. It is unclear if both the sheet travel direction and transverse direction have longitudinal directions or if the sheet travel direction is the longitudinal direction.

Regarding claims 30, 37 and 38, the claims recite, "a suction roller longitudinal axis extending in the sheet travel direction", is indefinite. The sheet travel direction is not defined. The sheet can travel in two directions on the plane.

Regarding claim 47, the claim recites, "a first table", is unclear. There is no recitation of further tables (second, third, etc.); hence a first table is indefinite.

Regarding claims 53-55, the claims recite the term "said narrow suction strip" in line 2 of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claims 32, 35, 37, 39, 41, 46, 49, 51, 52, 54, 56, 61, 64, and 67 appear to be written to invoke 35 USC 112 6<sup>th</sup> paragraph. However, the applicant has not formally invoked 35 USC 112 6<sup>th</sup> paragraph. Therefore, the examiner has construed the claims as not invoking 35 USC 112 6<sup>th</sup> paragraph. If the applicant wishes to invoke 35 USC 112 6<sup>th</sup> paragraph, please make a formal statement and identify the corresponding structure in the specification for each means plus function recitation.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30, 32, 33, 37-52, 60-61, and 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Henn et al (USP 6,505,831 B2)** in view of **Jeschke et al (USP 4,702,469)**. Regarding claim 30, 32, 33, 37-47, 52, 60-61, and 66-69 Henn discloses a device comprising a sheet support being a feed table (6) including a side register mark (5), a sheet holding device positioned above the sheet support (7), an effective sheet holding surface on the sheet holding device and having a longitudinal direction in the sheet travel direction and transverse direction, the longitudinal direction being greater than the transverse direction in a ratio greater than five (7), the sheet holding device being supported by a flexible shaft that drives rotation about the longitudinal axis above the sheet support (col. 4, lines 20-24). Henn does not disclose the sheet holding device being a suction roller comprising a plurality of suction hole segments on the roller, each having a plurality of circumferentially spaced suction holes, a suction roller drive motor (col. 3, lines 45-47), and a means for rotating the sheet transport suction roller through one half a revolution. Jeschke teaches a sheet holding device being a suction roller (20) having a plurality of suction hole segments on the roller (10), each having a plurality of circumferentially spaced suction holes (10) and a

means for rotating the sheet transport suction roller through one half a revolution (col. 5, line 68 and col. 6, lines 1-2) for the purpose of aligning sheets which are being conveyed slightly offset from one another over the feed table (col. 1, lines 42-43). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Henn's device with a suction roller, as taught by Jeschke, for the purpose of aligning sheets which are being conveyed slightly offset from one another over the feed table.

Regarding claims 48-51 and 53-55, Henn discloses all the limitations of the claims, but Henn does not disclose a suction roller that has spaced segments with suction holes on a peripheral surface and alternating with spaced segments with no suction holes, and a stationary pipe supporting the suction roller for rotation, means supporting suction air to said stationary pipe, and a narrow suction slit on the stationary pipe and being alignable with the suction holes to define a narrow strip of suction holes charged with suction, and a tolerance strip defined by an edge of a strip entering said sheet support. Jeschke teaches a suction roller that has spaced segments with suction holes on a peripheral surface and alternating with spaced segments with no suction holes (col. 7, lines 8-10), and a stationary pipe supporting the suction roller for rotation (23), means supporting suction air to said stationary pipe (48), and a narrow suction slit on the stationary pipe (44) and being alignable with the suction holes to define a narrow strip of suction holes charged with suction (10) and a tolerance strip defined by an edge of a strip entering said sheet support (15) for the purpose of air control means, through which the drive connected to a vacuum generator (col. 1, lines 53-55). Therefore, it

would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Henn's device with a suction roller, as taught by Jeschke, for the purpose of air control means, through which the drive connected to a vacuum generator.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henn in view of Jeschke (Henn/Jeschke) as applied to claim 30 above, and further in view of **Michatek (USP 4,245,831)**. Regarding claim 31, Henn/Jeschke disclose all the limitations of the claim, but do not disclose first and second spaced lines defining a length of the longitudinal direction of the holding surface and extending transverse to the sheet travel direction. Michatek teaches first and second spaced lines defining a length of the longitudinal direction of the holding surface and extending transverse to the sheet travel direction for the purpose of centering and guiding sheets along a tray (col. 4, lines 65-68 and col. 5, lines 1-2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Henn/Jeschke's device with first and second spaced lines, as taught by Michatek, for the purpose of centering and guiding sheets along a tray.

Claims 34 and 59 rejected under 35 U.S.C. 103(a) as being unpatentable over Henn/Jeschke as applied to claim 33 above, and further in view of **Hauptenthal (USP 5,542,659)**. Regarding claims 34 and 59, Henn/Jeschke disclose all the limitations of the claims, but do not disclose a suction roller with two suction hole segments that are diametrically opposite each other and are spaced by solid segments having a smaller radius. Hauptenthal teaches a suction roller with two suction hole segments that are

diametrically opposite each other (2 and 3) and are spaced by solid segments having a smaller radius (5 and 6) for the purpose of holding two sheets (col. 4, lines 35-37).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Henn/Jeschke's suction roller with two suction hole segments that are diametrically opposite each other and are spaced by solid segments having a smaller radius, as taught by Haupenthal, for the purpose of holding two sheets.

Claims 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henn/Jeschke as applied to claims 30,32, and 33 above, and further in view of **Hubner (USP 4,430,937)**. Regarding claims 63-65, Henn/Jeschke disclose all the limitations of the claims, but do not disclose bevel drive gears and a drive shaft. Hubner teaches bevel drive gears (11 and 16) and a drive shaft (14) for the purpose of driving the shaft (col. 3, lines 15-16). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Henn/Jeschke's device with bevel drive gears and a drive shaft, as taught by Hubner, for the purpose of driving the shaft.

Regarding claims 30, 31, 35, 36, 43-45, 48, 52, 53, 56-58, 60, 63, 66 and 69, a material (a first, second, and third sheets) being worked upon does not limit the apparatus (a device for aligning sheets). (See MPEP 2115)



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan Kumar whose telephone number is 571-272-8102. The examiner can normally be reached on Mon-Fri 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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